

REMARKS

The Office Action dated August 12, 2004 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1, 4, 6, 9-12, 16-19, 21, 23-47, 49-52, and 55-60 are currently pending in the application. Claims 6 and 11-12 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added. In the Office Action, claims 16-19, 21, 23-47, 49-52, and 55-60 were indicated as being allowed. Applicants wish to thank the Examiner for so indicating. Therefore, claims 1, 4, 6, 9-12 are respectfully submitted for consideration.

In the Office Action, claims 6 and 11-12 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 6 and 11 have been rewritten such that they are now in independent form. Claim 12 is dependent upon claim 11. Thus, Applicants submit that claims 6 and 11-12 are now in condition for allowance.

Claims 1, 4, and 9-10 were rejected under 35 U.S.C. 102(b) as being anticipated by Flammer III (U.S. Patent No. 5,471,469). The rejection is respectfully traversed for the following reasons.

Claim 1, upon which claims 4, and 9-10 are dependent, recites a method, which includes activating a node of a computer network such that the node first attempts to

establish contact with other nodes that may exist within the computer network by cycling through a set of common channels for communication within the computer network. The node, at each channel, attempts to establish contact by transmitting a request packet including a code identifying the network thereon and, after transmitting a request packet on one of the common channels, the node listens for a response packet before proceeding to a next one of the common channels. Upon receiving a response packet including the code identifying the network first transmitted by the request packet from one of the other nodes, the node enters a synchronization mode and joins the computer network. If the node is unsuccessful in establishing contact with other nodes, then the node establishes itself as a single node network.

The claimed invention is directed, in part, to a communication protocol that provides link-level and media access control (MAC) level functions for wireless (e.g. ad-hoc) networks. In ad-hoc networks, hosts and networks (e.g. LANs) may be attached to packet radios, which provide inter-node communication within the ad-hoc network. The protocol is robust to mobility or other dynamics, and for scaling to dense networks. In a mobile or otherwise dynamic network, it appears that any control-packet collisions will be only temporary and fair. In a dense network, the network performance degrades gracefully, ensuring that only a certain percentage of the common channel is consumed with control packets. The denser the network, the longer the access times for nodes to make data scheduling changes. However, the overall network capacity remains constant. Moreover, because the integrated protocol allows packets to be scheduled in a collision-

free and predictable manner, multicast packets can be reliably scheduled, as well as streams of delay or delay-jitter-sensitive traffic. Furthermore, using an optional secret network code, known only to authorized nodes in the network, the scheduling of control packets can appear to observers to be randomized—a useful security feature in some environments.

As will be discussed below, Flammer III fails to disclose or suggest all of the elements of claim 1, and therefore fails to provide the advantages discussed above.

Flammer III discloses a method of resolving media contention in radio communication links. A plurality of nodes in a wireless packet LAN communication system each has a receiver and a transmitter. A source node transmits a poll packet that polls the target node to determine whether the target node is able and willing to accept a specified number of data packets at a specified level of priority. If the target node returns an acknowledgement, the target node reserves access to itself for the polling station at a preselected time for a preselected duration on a specified frequency channel that is different from the assigned channel according to a band plan for the target node. The source node then transmits its data packet to the target node's data receive channel and waits for an acknowledgement on its own receive channel.

Applicants respectfully submit that Flammer III fails to disclose or suggest all of the elements of claim 1. Flammer III does not disclose that the request packet includes a code identifying the network, as recited in present claim 1. Rather, Flammer III only discloses a poll packet, transmitted by a source node, that polls the target node to

determine whether the target node is able to accept a specified number of data packets (Flammer III, Column 3, lines 6-9). Thus, Flammer III fails to disclose or suggest this element of claim 1.

Additionally, Flammer III does not disclose or suggest the limitation “wherein upon receiving a response packet including the code identifying the network first transmitted by the request packet from one of the other nodes, the node enters a synchronization mode and joins the computer network and, if unsuccessful in establishing contact with other nodes, then the node establishes itself as a single node network,” as recited in independent claim 1 of the present invention. Flammer III makes no mention of a node joining the network or establishing itself as a single node network. According to the method disclosed in Flammer III, the node is already a member of the network and is only seeking to transmit its data packet to another node (target node) that is also a member of its network (Flammer III, Column 3, lines 13-24). Thus, Flammer III also fails to disclose or suggest this limitation of claim 1 of the present invention.

Applicants note that claims 4 and 9-10 are dependent upon claim 1. Therefore, claims 4 and 9-10 should be found allowable for at least their dependence upon claim 1, and for the specific limitations recited therein.

For at least the reasons discussed above, Applicants respectfully assert that Flammer III fails to anticipate the claimed invention.

Applicants respectfully submit that Flammer III fails to disclose or suggest critical and important elements of the claimed invention. These distinctions are more than

sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of presently pending claims 1, 4, 6, 9-12, 16-19, 21, 23-47, 49-52, and 55-60 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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